

ABSTRACT OF THE DISCLOSURE

BACKSIDE BURIED STRAP FOR SOI DRAM TRENCH CAPACITOR

1 In SOI integrated circuits having trench capacitor DRAM arrays, the
2 decreasing thickness of the insulating layer causes cross-talk between the
3 passing wordline traveling over the trench capacitor. Increasing the depth
4 of the recess at the top of the trench and undercutting the insulating layer
5 laterally permits the buried strap from the capacitor center electrode to make
6 contact to the back side of the SOI layer, thereby increasing the vertical
7 separation between the passing wordline and the strap.